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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,314	03/01/2002	Claude Zeller	F-417	2091
919	7590	02/07/2005	EXAMINER	
PITNEY BOWES INC. 35 WATERVIEW DRIVE P.O. BOX 3000 MSC 26-22 SHELTON, CT 06484-8000			BHATNAGAR, ANAND P	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/087,314	ZELLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anand Bhatnagar	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/17/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities: The number for claim 1 is missing and also the word "a" on line 5 should be "an." Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. A.) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims limitation states to create a bit map file for the original printed image but this is nowhere in the specifications. In the specifications paragraphs 016 and 020 both describe a bit map file of **non-**printed data and not of printed data.

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- B.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1: This claim is indefinite for the following reasons: In line 9 of the claim the signal of the strength the original image is determined but the examiner is unsure if applicant is referring to the image of line 4 or the "original printed image" of line 7. On lines 10-11, applicant obtains the signal strength of a printed image and the signal strength of the original printed image for comparison but the examiner is unsure if the signal strength of the printed image is of the "image" of line 5 or the "**scanned** original printed image" of line 7. Also, on line 11, examiner is unsure if the "printed image" is the "image" of line 5 or the "**scanned** original printed image" of line 7. The limitations, as stated, wherein the printed image is not being defined as to which printed image is being referred to makes this claim, as well as all claims dependent from this claim, vague and indefinite.

Regarding claims 6 and 7: In lines 1 and 2 of both claims applicant analyzes the signal strength of the printed image but examiner is unsure if he is referring to the "original printed image" or the "copies of the original printed image" of claim 5 or of the "image" of claim 1, line 5, or the "scanned original printed image" of claim 1, line 7. Examiner will address these claims as best understood.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhoads et al. (U.S. patent pub. 2004/0190751 A1).

Regarding claim 1: A method for embedding information in an image so that the image will have different information when the image is reproduced by a scanning or printing process (paragraphs 0008 and 0009), the method comprising the steps of:

embedding digital information in an image (fig. 1 element 10 and paragraphs 0010 and 0039;

printing the embedded digital information and the image to produce a original printed image (fig. 1 elements 10, 12, and 13, paragraphs 0010 and 0042);

scanning the original printed image to obtain a digital image of the embedded information and the image (fig. 1 element 10B and paragraph 0042,

wherein the printed image that contains the watermark(s) is copied, i.e. scanned);

determining the signal strength of the original image (paragraph 0010, wherein the energy level is read as the signal strength); and

comparing the signal strength of a printed image with the signal strength of the original printed image to determine whether or not the printed image is a copy of the original printed image (paragraph 0010, wherein the energy level is read as the signal strength).

Regarding claim 4: The method wherein a bit map file is created for the original printed image (paragraph 0010, wherein bit patterns, read as bit map file, are used for the watermarking).

Regarding claim 5: The method wherein the comparing step further including the step of:

measuring the signal strength of the original printed image to set a threshold value for the original printed image and copies of the original printed image (paragraph 0010, wherein the energy level is used to differentiate between a original print or a copy of the original print. In order to different this there inherently has to be a threshold level set which defines an original print or a copy of the original print).

Regarding claim 6: The method whereby if the signal strength of a printed image is greater than the threshold value the printed image is the original printed image (paragraph 0010, wherein the energy level is used to differentiate between

a original print or a copy of the original print. In order to different this there inherently has to be a threshold level set which defines an original print or a copy of the original print).

Regarding claim 7: The method whereby if the signal strength of a printed image is less than the threshold value the printed image is not the original printed image (paragraph 0010, wherein the energy level is used to differentiate between a original print or a copy of the original print. In order to different this there inherently has to be a threshold level set which defines an original print or a copy of the original print).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A.) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads et al. (U.S. patent pub. 2004/0190751 A1) and Hayashi et al. (U.S. patent 5,829,895).

Regarding claim 2: The method wherein the image is a postal indicia.

Rhoads et al. discloses to embed a watermark into an image and based on energy levels determine if the watermarked image is an original printed image

or a copy of the original printed image. Rhoads does not disclose wherein the image is a postal indicia. Hayashi et al. teaches to embed a watermark into a postal indicia (Hayashi et al.; col. 2 lines 63-67, col. 3 lines 1-1-8, and col. 7 lines 35-38). It would have been obvious to one skilled in the art to combine the teaching of Hayashi et al. into the system of Rhoads et al. because they are analogous in watermarking. One in the art would have been motivated to incorporate the teaching of Hayashi et al. into the system of Rhoads et al. in order to mark a postal indicia in order to be able to identify if it is an original postal indicia or a counterfeit.

B.) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads et al. (U.S. patent pub. 2004/0190751 A1) and Cass et al. (U.S. patent 5,946,414).

Regarding claim 3. The method wherein the image is a graphic.

Rhoads et al. discloses to embed a watermark into an image and based on energy levels determine if the watermarked image is an original printed image or a copy of the original printed image. Rhoads does not disclose wherein the image is a graphic. Cass et al. teaches to embed a watermark into a graphic image (Cass et al.; col. 3 lines 17-20 and col. 6 lines 42-47). It would have been obvious to one skilled in the art to combine the teaching of Cass et al. into the system of Rhoads et al. because they are analogous in watermarking. One in the art would have been motivated to incorporate the teaching of Cass et al. into the



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system of Rhoads et al. in order to mark someone's artistic work wherein it can be identified as an original or counterfeit.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cooklev (U.S. patent 6,359,998) for a digital watermarking system.

**Contact Information**

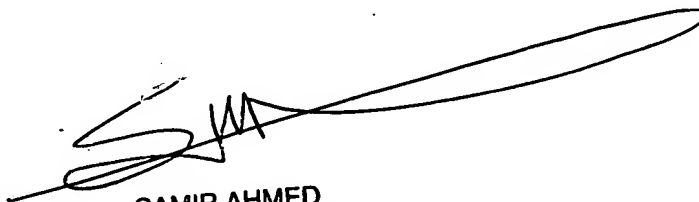
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group fax is 703-872-9306, and Tech center 2600 customer service office number is 703-306-0377.

AB

Anand Bhatnagar

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February 5, 2005

  
SAMIR AHMED  
PRIMARY EXAMINER